US Army Corps of Engineers
Mississippi Valley Division
Mississippi River Commission

St Paul District
Regulatory Branch

Update on Compensatory Mitigation Objectives

November 18, 2005

Regulatory Web Page:
http://www.mvp.usace.army.mil/regulatory/

Compensatory Mitigation

The fundamental objective of compensatory mitigation for Clean Water Act purposes is to achieve, at a minimum, 1.0:1.0 FUNCTIONAL replacement (no net loss) of wetland functions with an adequate margin of safety to reflect anticipated success.

Current Issues in Mitigation

- Moving away from acreage surrogate to functional replacement
- Encouraging creation of saturated soil wetland types
- Proposed mitigation banks must be reviewed in the District prior to Corps approval
- Mitigation may be required to offset impacts to isolated waters or upland natural resources.

Compensatory Mitigation Objectives

- To achieve the highest degree of success for compensatory mitigation, District efforts will focus on:
  - Enforceable permit conditions,
  - Specific performance standards,
  - Adequate monitoring,
  - Adaptive management, and
  - Sufficient legal protection

Corps Emphasis Areas

- **In-kind Replacement:**
  - **Replacement of saturated soil wetland types (wet meadows, sedge meadows, shrub-carr, forested wetlands).**
  - **Compensation site design should focus on these wetland types**
  - **Shrub and forested wetlands can be established at compensation sites**
    - **Requires an adjustment of time frame & expectations.**

Corps Emphasis Areas

- Emphasis on Target Vegetation and Target Hydrology:
  - Specific seed mixtures for both wetland and upland (buffer) plantings matched to specific hydrology performance standards.
  - "Meets 1987 Manual minimum hydrology criterion" is no longer accepted as a hydrology performance standard.
  - St. Paul District has developed hydrology performance standards for each wetland type.

Background

What is Driving these Emphasis Areas?

National Academy of Sciences Report, 2001
http://www.nap.edu/books/0309074320/html/
GAO Report, May 2001
http://www.epa.gov/owow/wetlands/pdf/GAO.pdf

- provided a critical evaluation of the effectiveness of wetlands compensatory mitigation for authorized losses of wetlands and other waters under Section 404 of the Clean Water Act.

These studies/analyses identified compensatory mitigation shortfalls and identified a variety of technical, programmatic and policy recommendations:

- **Temporal** – mitigation occurs before or concurrent with impact; sites monitored for longer periods of time.

- **Functions and Values** – goals of mitigation based on an assessment to replace lost functions and values/wetland communities;monitoring based on performance standards.

- **Spatial** – mitigation based on larger landscape view; watershed approach; ecotype/zone.

A review of wetland compensation sites in the St. Paul District found the *following problems*:

- failure to establish the required acreage specified in the permit;
- risk of failure due to dependence on structures (e.g., dikes) and need for maintenance;
- dominated by invasive species;
- degraded by stormwater input;
- mitigation sites not fully functional for some period of years (e.g., marsh systems take 2 years; shrub systems 8 years and forested wetlands 20 years or more);
- debiting bank credits for out-of-kind compensation and/or in other counties/watersheds;
- lacked long-term legal protection (e.g., covenants).

- Due to the need to respond to NAS study and other critiques - COE issued regulatory mitigation guidance (2002)(RGL 02-2):

"…advance an ecologically meaningful program that mitigates the losses of wetland functions and values, emphasizes accountability and monitoring and integrates mitigation into a watershed context…"

- Corps districts will provide a rationale for acreage replacement.

http://www.usace.army.mil/inet/functions/cw/hot_topics/RGL_02-2.pdf

Corps of Engineers – Nationwide

is leading the development of a Mitigation Action Plan (ongoing). The MAP is an interagency effort lead by the Corps and EPA.
http://www.mitigationactionplan.gov

St Paul District

- Wisconsin – Guidelines for compensatory mitigation in place since 2002 – Public Notice.
http://www.dnr.state.wi.us/org/es/science/publications/wetland_mitig.pdf

- Minnesota – Draft Guidelines – St Paul District Compensatory Mitigation Policy for Minnesota - dated April 2005 (including companion *Ecological Rationale*).

Components of Compensatory Mitigation

- Baseline information
- mitigation goals and objectives
- factors considered in site selection
- written specifications
- performance standards
- parties responsible for compliance
- legal means for protecting mitigation
- contingency plans
- monitoring and long-term reporting plans,
- financial assurances

In the Works

- The Corps is considering a National Mitigation Policy – COE and EPA effort.
  - Moving away from acreage surrogates to functional replacement.

- District encourages use of functional assessments.
  - WisRAM vs. MnRAM

http://www.bwsr.state.mn.us/wetlands/mnram/

In the Works

- Proposed GP-002-WI
  - A new general permit for Wisconsin designed to replace the GPs in GP/LOP-98-WI.
  - One GP with a non-reporting section and a reporting section.
  - Currently undergoing internal Corps review.
  - LOP procedures will be issued separately, with little change anticipated.

In the Works

- The District is considering an in-lieu fee mitigation proposal for use in WI.
  - Limited to GP or LOP authorizations.
  - For local road projects only
  - Not for projects eligible to use WDOT banks.

- Regionalization of the 1987 Manual is underway:
  - MN and WI in supplements slated for 2009
  - Arid West Regional Supplement is out for review

http://www.usace.army.mil/inet/functions/cw/cecwo/reg/reg_supp.htm

Recent Developments

- **Technical Standard for Water-Table Monitoring of Potential Wetland Sites:**
  http://www.nap.usace.army.mil/cenap-op/regulatory/water_monitor_technote.pdf

- **Updates in Version 5.9 Field Indicators of Hydric Soils in the United States**

  http://www.epa.gov/reg3esd1/hydricsoils/pdf/Update%205.9%20of%20%20Hydric%20soil%20indicators%20in%20Mid-Atlantic%20US.pdf